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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,829	07/12/2000	Francis J. Kronzer	11301-0901	3150

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EXAMINER	
TORRES VELAZQUEZ, NORCA LIZ	
ART UNIT	**PAPER NUMBER**
1771	

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/614,829	KRONZER, FRANCIS J.	
	Examiner	Art Unit	
	Norca L. Torres-Velazquez	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 July 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 15-20 have been canceled as indicated by Applicants on amendment filed June 23, 2003. Claims 1-14 are pending.

Response to Arguments

1. Applicant's arguments filed June 23, 2003 have been fully considered but they are not persuasive.

a. With regards to the rejection of claims 1-14 under 35 U.S.C. 102 (e) over Williams et al. (US 6,410,200), Applicants argue that Williams does not teach a transfer material having two layers that remain with a heat-transfer material substrate after an image is transferred with heat and pressure.

It is noted that Applicants are arguing limitations that are not in the claim (i.e. when referring to two layers remaining with the heat-transfer material substrate after transferring an image). The product presently claimed comprises a first meltable layer, a second meltable layer with a release coating separating the first and second meltable layers. The claims do not include any limitation with regards to the location of the layers after the image is transferred to a substrate.

b. Further, Applicants argue that the named "release layer" of Williams is unconventional. The conventional use of this term is to describe a layer that releases, not an adhesive layer that is transferred to a second substrate.

However, it is also noted that the "barrier layer" of Williams could also be interpreted or equated to the release layer of the present invention, since the term "meltable" is interpreted as any material capable of melting. The substrate in the form of

a film could be equated as the first meltable layer of the present invention and the image receiving layer as the second meltable layer.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by WILLIAMS et al. (US 6,410,200 B1) as stated in previous action.

WILLIAMS et al. discloses a coated transfer sheet comprising a substrate having a first and second surface; optionally at least one barrier layer overlaying the first surface, at least one release layer overlaying the barrier layer and an optional image receiving layer comprising an

ethylene acrylic acid co-polymer dispersion; wherein the coated transfer sheet exhibits cold peel and hot peel properties when transferred. (Abstract) The reference invention relates to an image transfer paper which can be used in electrostatic printers and copiers or other devices in which toner particles are imagewise applied to a substrate, and having images which are capable of being directly transferred to, for instance, a receiver such as a textile, such as a shirt or the like. (Column 1, lines 17-23). The reference teaches that the substrate may be a nonwoven cellulosic support, or polyester film support, with overcoat layers such as an optional barrier layer comprising a polymer to prevent the toner from adhering to the support. (Column 3, lines 25-28) Further, the reference discloses that the substrate may be the base material for any printable material, such as described by KRONZER. (Column 4, lines 49-53). The substrate taught by WILLIAMS et al. equates to the base substrate claimed by Applicants on claims 2-5.

WILLIAMS et al. further teaches a barrier layer as an optional first coating on the substrate. The barrier layer also assists in releasing the optional image receiving layer and the release layer(s). The barrier layer, when necessary, is between the substrate and the release layer. Furthermore, in a preferred embodiment of the invention, the barrier layer is present as both cold and hot peelable coat, and remains with the support after transfer. The reference teaches the use of a thermoplastic polymer. Further, the barrier layer formulations taught by the present reference are compatible with the Examples for the meltable layers disclosed by Applicants in the Specification. (Column 6, lines 16 through Column 8, lines 1-47)

The reference further teaches that the release layer is formed on the substrate between an optional barrier layer and an optional image receiving layer. The release layer of WILLIAMS et al. facilitates the transfer of the image from the substrate to the receptor. (Column 8, lines 49-53)

The image receiving layer functions as a retention aid for the image and is an acrylic coating. (Column 16, lines 36-43) The basis weight of the Image receiving layer may vary from about 2 to about 30 gsm. Desirably, the basis weight will be from about 3 to about 20 gsm. It typically will have a melting point of from about 65° C to about 180° C. (Column 17, lines 32-40)

It is further noted that the WILLIAMS et al. reference teaches that the release layer of their invention must provide the properties to effectively transfer the release layer and any images and/or optional layers thereon. (Column 8, lines 54-56)

Regarding claim 11, the WILLIAMS et al. reference teaches that textiles including cotton fabric, and cotton blend fabric are the preferable receptor elements for receiving the transferred image. When the image is transferred, the transfer element is optionally allowed to cool from one to five minutes. The substrate is then peeled away from the image, which is adhered to the receptor. (Column 20 lines 20-54) WILLIAMS et al.' s teachings anticipate claim 11, which requires the heat transfer material in combination with a fabric. Further, it is also noted that the "barrier layer" of Williams could also be interpreted or equated to the release layer of the present invention, since the term "meltable" is interpreted as any material capable of melting. The substrate in the form of a film could be equated as the first meltable layer of the present invention and the image receiving layer as the second meltable layer.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

OSHIMA et al. (US 5,427,997) - discloses a heat transfer cover film. In Figure 1, the reference shows the heat transfer cover film wherein a release layer 3 is provided between a resin

layer 2 and a substrate film 1. A back layer 4 is provided to prevent a printer's thermal head from sticking to the film 1. The reference further teaches that *the substrate film 1 includes tissues such as glassine paper, condenser paper and paraffin paper.* (Column 4, lines 11-35)

KRONZER (US 6,200,668 B1) – provides a printable heat transfer material having cold release properties, which includes a first layer (film or a cellulosic nonwoven web), a second layer composed of a thermoplastic polymer having essentially no tack at transfer temperatures that equates to the release coating of the present invention; and a third layer that includes a thermoplastic polymer which melts in a range of from about 65°C to about 180°C. (Column 2, lines 40-55) The reference further teaches that a fourth layer may overlay the third layer in order to provide an ink jet printable heat transfer material and also teaches an optionally fifth layer that may overlay the second layer, in which case the third layer will overlay the fifth layer, rather than the second layer. (Column 3, lines 3-11) *The reference further teaches that the first layer serves as a base sheet or backing.* (Column 4, lines 25-45)

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Norca L. Torres-Velazquez
Examiner
Art Unit 1771

February 2, 2004